OSWER Innovations Pilot

Facility Decontamination in the Wood Preserving Industry

The Office of Solid Waste and Emergency Response (OSWER) Assistant Administrator Marianne Horinko in December 2001 initiated a series of innovative pilots to test new ideas and strategies for environmental and public health protection to make OSWER programs more efficient, effective, and user-friendly. A small amount of money is set aside to fund creative proposals submitted by OSWER Headquarters and Regional employees. EPA employees are encouraged to talk to States, Tribes, local governments and external stakeholders about proposal ideas and partner on a project. The creative projects test approaches to waste minimization, energy recovery, recycling, and land revitalization that may be replicated across various sectors, industries, communities, and regions. We hope these pilots will pave the way for programmatic and policy recommendations by demonstrating the environmental and economic benefits of creative, innovative approaches to the difficult environmental challenges we face today.

BACKGROUND

The Resource Conservation and Recovery Act (RCRA) regulates wastes generated by facilities, including those facilities that conduct wood treatment. Wood treatment facilities use three main chemicals to treat wood, including pentachlorophenol (PCP), chromated copper arsenate (CCA), and creosote. This project will address facilities currently using PCP and CCA wood preservatives.

The hazardous wastes that are generated by facilities that use PCP contain toxic dioxin and furan compounds. RCRA regulations require the wood treatment industry to clean the drip pad and process equipment to "non-detect" concentrations of dioxin and furan compounds. However, there are no specific decontamination procedures established in the regulations for industry to follow–only general guidance requirements. Wood preservers may be encountering difficulties in cleaning their plants, thereby preventing them from switching to less toxic chemicals available on the market and remaining in the RCRA regulatory universe.

The wood preserving industry has voluntarily decided to change the treatment of lumber used by consumers away from CCA pressure-treated wood by December 31, 2003, in favor of new alternative wood preservatives. The transition will affect wood used in play structures, decks, picnic tables, landscaping timbers, residential fencing, patios, and walkways. In the event that a facility fails to properly clean their sumps, drip pads, and other equipment at the time of conversion from CCA, the facility could run the risk of being subject to RCRA hazardous waste regulations.

PILOT APPROACH

U.S. EPA Region 7 will develop an equipment cleaning methodology for wood preserving facilities to assist in the conversion from PCP and CCA to less toxic chemicals. Region 7 will contact candidate facilities (one CCA and one PCP) to obtain their permission to test cleaning methods at their facilities. Standard operating procedures will be prepared for performing a simple, cost-effective cleaning of a wood treatment facility's drip pad, sumps, retorts, tanks, and other process equipment. EPA Region 7 will determine whether the cleaning procedure is appropriate for use by a wood treatment facility that is undergoing conversion.

In the event that the facilities are decontaminated to acceptable levels, the procedures and results of the study and the results will be provided on the EPA Region 7 Wood Treatment Sector web page. Also, streamlined composite sampling and analysis procedures will be provided to the facilities.

INNOVATION

This project will provide the wood treatment industry with innovative methods to properly clean their facilities at minimal expense.

BENEFITS

It is estimated that as many as one third of all wood treatment facilities in the country may have previously used PCP. This Pilot would directly assist these facilities by allowing them to come into compliance with RCRA. In addition, the Pilot will assist CCA facilities who must conduct their conversions to other preservatives prior to December 31, 2003. By facilitating the conversion to other preservatives, the Pilot will enable facilities to eliminate disposal of hazardous wastes at a RCRA permitted facility since the wastes generated following conversion would be nonhazardous. Consumers would no longer be purchasing CCA- and PCP-treated wood containing hazardous constituents such as arsenic, chromium, PCP, dioxin, and furan compounds.

CONTACTS

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Visit the EPA OSWER Innovations web site at: www.epa.gov/oswer/IWG.htm and EPA Region 7's Wood Treatment Sector Web site at:www.epa.gov/region7/woodtreat.